# Electronics & Microcontrollers Pathway

### Sophomore - Hardware and Electronics

- DC Breadboarding
  - One quarter
  - Read schematic
  - Create DC Circuit
  - Basic component identification
- Testout PC Pro
  - Three quarters
  - PC Pro Certification
  - Similar to A+

#### Junior - Electronics and Microcontrollers

- Soldering
- Electronics Repair
- Microcontroller Programming
- Cabling
- Component Identification
- Hardware
- Tool Usage
- CAD Computer-aided Design

#### Senior - Electronics and Microcontrollers

- DC, AC, & Analog Theory
  - Lots of math!
- Troubleshooting
- Bench equipment usage
  - Oscilloscopes
  - Function generators
- Problem-solving

## Internships

- Schweitzer Engineering Laboratories
  - Python
  - o C++
  - Button bot
- Reuseum
  - Storefront
  - Teaching kids to make simple robots
  - Sorting parts